

Amendments to the Drawings

Kindly replace the originally filed Drawing Sheets 1-2/2 with the enclosed Replacement Sheets 1-2/2 containing formal drawings, Figures 1-4. No new matter is added.

REMARKS

The application was filed with Claims 1-15. Claims 1-15 remain in the application. Claims 12 and 14 stand rejected under 35 USC §112. Claims 1-10 and 13 stand rejected under 35 USC §102. Claim 15 stands rejected under 35 USC §103. These rejections are respectfully traversed.

The Examiner has indicated that Claims 11, 12 and 14 contain allowable subject matter, and would be allowable if rewritten to contain all of the limitations of the base claim and any intervening claims, and to overcome any rejections under 35 USC §112. Applicant thanks the Examiner for this indication of allowable subject matter. At this time, however, Claims 12 and 14 have been amended only to overcome the rejections under 35 USC §112. Claims 11, 12 and 14 have not been rewritten to contain further limitations. Applicant maintains that the preceding claims are allowable in their present form, as is further discussed below.

Replacement Sheets 1-2/2, containing formal drawings, Figures 1-4, are submitted for entry. No new matter is added.

Rejections under 35 USC §112

Claims 12 and 14 stand rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. At the Examiner's recommendation, the phrase "in particular" has been deleted from Claim 12. Likewise, the phrase "similar to a stud screw" has been deleted from Claim 14. In light of the amendment, withdrawal of the rejection, and reconsideration of Claims 12 and 14, is respectfully requested.

Rejections under 35 USC §102

Claims 1-10 and 13 stand rejected under 35 USC §102(b) as being anticipated by Schmidt. This rejection is respectfully traversed.

It is well established that in order for a claim to be anticipated by a reference, each and every limitation of the claim must be found in the reference. Schmidt discloses a device corresponding to the "state of the art" as disclosed in this application as Fig. 1 and the corresponding text of the specification. In the Schmidt patent, a piston plate 60 includes a valve pin 52. The valve pin extends axially through a central bore 94 in the piston plate. The piston plate 60 has a sleeve-type extension extending through an opening in the end plate 106. A seal 70 is arranged in the opening of the end plate 106. The seal 70 seals the inner surface of the opening of the end plate 106 against the outer surface of the sleeve-type extension of the piston plate 60. Accordingly, the cylinder chamber 128 is sealed by the seal 104 and the seal 70.

According to the present invention, the cylinder or work chamber 19 is sealed by a first sealing element 22 (corresponding exactly to the seal 104 of Schmidt) and a second sealing element 32. In contrast to Schmidt, the sealing element 32 is sealing in direct contact with the cylindrical shaft 27 of needle 25. This arrangement allows placement of more needles side by side, in closer arrangement, than is permitted by the prior art. The resulting tool is lighter, smaller and more responsive, because the mass of the piston plate can be reduced. The resulting tool is also less expensive, and makes it possible to realize a very tight spacing of the injection nozzles and mold cavities. This arrangement is not disclosed by Schmidt. Specifically, the claimed element of the second sealing element being arranged between the wall of the recess and the needle, and being in direct contact with the needle, is not disclosed by Schmidt. Therefore, since every element of the Claim 1 is not disclosed by Schmidt, Claim 1 is not anticipated by Schmidt. Withdrawal of the rejection of Claim 1 is respectfully requested. Withdrawal of the rejection of Claims 2-10 and 13, which

depend from Claim 1, and reconsideration of Claims 1-10 and 13, is also respectfully requested.

Further, the inventive features claimed herein would not have been obvious to one of ordinary skill in the art at the time the invention was made. The conventional arrangement of Schmidt constitutes the well established practice in the field, with its attendant limitations regarding space constraints, expense and responsiveness. Absent the teaching of the present application, there is no suggestion or motivation, either in the references of record, or in the knowledge of one of ordinary skill in the art, to modify the mechanism of Schmidt to reach the claimed invention.

Rejections under 35 USC §103

Claim 15 stands rejected under 35 USC §103(a) as being unpatentable over Schmidt as applied to Claims 1-10 and 13 above, and further in view of Greenberg et al. This rejection is respectfully traversed.

In order to establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)

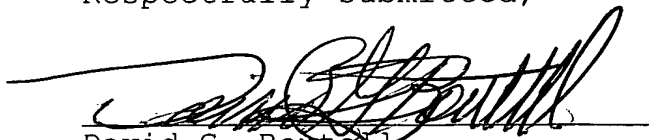
First, there is no suggestion or motivation found in the references or the knowledge of one of ordinary skill in the art to combine the reference teachings. Schmidt is directed to a fluid cooled hydraulic actuating mechanism for injection molding. Specifically, Schmidt is directed to the control of

the injection molding process. In contrast, Greenberg et al. is directed to the physical ejecting of "giant" articles from an injection mold using a hydraulically actuated system of plungers independent from the injection system. Second, even if the combination were made, however untenable, it would not reach the claimed invention. As discussed above, the Schmidt reference does not teach each and every limitation of independent Claim 1, from which Claim 15 depends. Specifically, Schmidt does not teach the limitation of a second sealing element in contact with the needle. This limitation is further not taught by Greenberg et al. Further, the references, either alone or in combination, do not teach the at least two needles arranged on a piston plate, as required by Claim 15. Because there is no motivation or suggestion to make the combination of Schmidt and Greenberg et al., and further because the combination does not teach limitations of Claim 15, Claim 15 should be considered allowable over the cited prior art references. Withdrawal of the rejection and reconsideration of Claim 15 is respectfully requested.

Conclusion

In light of the foregoing, Applicant asserts that the claims are in condition for allowance, and early Notice of Allowability is courteously solicited. If necessary to expedite further prosecution of the application, the Examiner is invited to contact Applicant's listed representatives.

Respectfully submitted,



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